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ADDENDUM TO THE CONTAMINATION ASSESSMENT REPORT NAVY SUPPLY CENTER
FUEL FARM NS MAYPORT FL
10/30/1998
BHATE ENVIRONMENTAL

**NAVAL STATION MAYPORT
MAYPORT, FLORIDA
BHATE PROJECT NO: 9970082
FL-COMPQAP NO: 970052**

**ADDENDUM TO THE
CONTAMINATION ASSESSMENT REPORT
NSC FUEL FARM**

Prepared for:

**DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
2155 EAGLE DRIVE, POST OFFICE BOX 190010
NORTH CHARLESTON, SOUTH CAROLINA 29419-1910**

Prepared by:

**BHATE ENVIRONMENTAL ASSOCIATES, INC.
1608 13th AVENUE SOUTH
BIRMINGHAM, ALABAMA 35205
TELEPHONE: (205) 918-4000**

OCTOBER 30, 1998



Bhate Environmental Associates, Inc.
Environmental Engineers & Scientists

STATEMENT OF WORK

1.0 GENERAL INTENTION

1.1 SCOPE. The contractor shall provide all labor, equipment and materials, required to perform remedial activities at the Naval Supply Center (NSC) Fuel Farm at Mayport Naval Station, Mayport, Florida.

1.2 GENERAL DESCRIPTION. The work includes the requirements specified in the Environmental Response Action Contract N62467-98-D-0995, the Detailed Requirements, and work necessary to remediate the site in accordance with Florida Administrative Codes 62-761 and 62-770. The following phases may be required:

- a. Phase 1 – Information gathering/remedial technology selection
- b. Phase 2 – Strategic Planning meetings and site visits to include all required submittals, Remedial Action Plan, and project budget estimate
- c. Phase 3 - Specified site remediation
- d. Phase 4 - Project Closeout reporting
- e. Phase 5 – Long Term Monitoring

Additional phases and tasks beyond those identified in the original delivery order and subsequent modifications, will be negotiated and included at a later date by formal modification to this delivery order.

1.2.1 LOCATION. The work is located at the NSC Fuel Farm, Naval Station Mayport, Florida.

1.2.2 DESCRIPTION OF CONTAMINANTS PRESENT. There is petroleum-contaminated soil and groundwater and possibly free product at this site.

2.0 APPLICABLE DOCUMENTS

2.1 REFERENCE REPORTS ACCOMPANYING SPECIFICATION. The following reference reports accompany this statement of work and are intended to act as design guidance for the remedial activities at the site. These specifications are property of the Government and shall not be used for any purpose other than that intended by the specification.

- 1. Contamination Assessment Report – NSC Fuel Farm , Dtd. December 10, 1997, Bhate Environmental Associates, Inc.
- 2. Addendum to the Contamination Assessment Report, Dtd. September 29, 1998, Bhate Environmental Associates, Inc.
- 3. Replace Fuel Tanks, Naval Station Mayport, 90% Design submittal, Dtd. Oct., 1998, Enterprise Engineering, Inc. (Subject to update to final document)
- 4. Guidance for Construction Completion Reports - For RAC Contracts

3.0 GENERAL REQUIREMENTS

3.1 FACILITIES AND SERVICES

3.1.1 Availability of Utilities Services. The availability, type, and possible cost of any utility services provided to the contractor will be determined during phase 2. The basis for this determination will be the type of utilities available at the site, the amount of the services required, and the cost of the services.

3.2 SUBMITTALS FROM BASIC CONTRACT

3.2.1 Submittal Delivery Schedule. Government will establish the time frames for each of the required submittals for this delivery order during discussions with contractor.

4.0 DETAILED REQUIREMENTS

4.1 TASK. Remediation Activities at NSC Fuel Farm, Mayport Naval Station, Mayport, FL.

4.1.1 Phase 1. The contractor will contact Beverly Washington, at (843)820-5581 to determine the current status of site studies and to gain access to all additional relevant information concerning site remediation. The contractor shall, if necessary, conduct a site visit and consult with study contractor, Military Construction design contractor and Navy personnel to obtain all necessary background information available to prepare the documents required under phase 2 of the project.

4.1.2 Phase 2. The contractor will develop a Remedial Action Plan (RAP) for the site in accordance with Florida Administrative Code 62-770 and upon Navy review and approval, submit it to the Florida Department of Environmental Protection(FDEP) for approval. The contractor shall then develop project budget submittals based on the FDEP approved RAP, data collected, the information contained in the reference reports, and decisions reached during the technical discussions. This and all other required documentation shall be submitted to the Government for review and approval.

4.1.3 Phase 3. After phase 2 is completed and acceptable, the Government will notify the contractor so that he can begin the remediation. The contractor will perform the work in accordance with the plans and submittals approved in phase 2 and the requirements listed in the Environmental Response Action Contract N62467-98-D-0995.

4.1.4 Phase 4. After completion of the project, the contractor shall prepare and submit a closeout report for the site in accordance with ref. document 4.

5.0 SCHEDULE OF PERFORMANCE

5.1 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK. The contractor shall be required to commence work under this delivery order, prosecute the work diligently, and complete the entire project in the manner and time agreed to in the approved Phase 2 meetings, Remedial Action Plan and submittals.

5090
Code 1848
21 Sept 98

Ralph Crist
FISC Fuel Depot
8808 Somers Rd
Jacksonville, FL 32218-2600

Concerns of NSC Fuel Farm

1. Contaminated Soil Zones:

Enterprise Engineering will excavate soils in Zone C (as specified in Bhate's July 15, 1998 letter) only. Zone C represents soil depths at elevations of 10 to 15 feet above Mean Sea Level (msl). Soils in this zone are estimated to be 468 cubic yards.

The approximate disposal cost is --- $468 \text{ cu. yds} \times \$75.00 / \text{cu. yds} = \$35,000.00$.
(I believe this cost is before contractor mark-up).

A unit cost for additional contaminated soil removal and disposal will be in the specs.

2. Untouched Soil Zones:

The existing foundation for tank 202 will remain in place. The foundation is at an elevation of 10 feet above msl. Enterprise's Engineering designs show no excavation occurring in zones A and B. Zone A represents soil depths at elevations 2 to 5 feet above msl. Zone B represents soil depths at elevations 5 to 10 above msl.

Soil contaminated in Zones A and B are estimated at 4,333 cu. yds. and 1684 cu. yds. respectively.

3. Soil Contamination Directly Beneath Tank 202:

Soil contamination may exist directly beneath the concrete foundation. Borings will be taken at the center of and at equally spaced intervals of the existing foundation. Samples will also be taken from around the perimeter of the existing foundation. Lab turn-around-time shall be as early as possible.

4. Remedial Actions for Contamination Beneath Existing Foundation:

If contamination below the foundation is such that requires future remediation, the Remedial Action Contract (RAC) Contractor shall install a horizontal well (s) beneath the foundation for future remedial use.

The estimated time for installation of the horizontal well is approximately **one week**. This can be coordinated around the tank removal efforts.

The state likes the idea that future site remedial efforts are being considered.

5. RAC Contractor Efforts:

The RAC contractor is presently not on board. NAVSUP's funds will be used to bring the RAC contractor on board unless otherwise directed.

Remedial efforts at this site may be eligible for future ERN funds. If this site is found to be ERN eligible, funds will not be available prior to the FY 2000. ERN funds for FY '99 are already budgeted.

The RAC contractor can be used to coordinate pre-remedial activities with Enterprise, collect tank closure samples, obtain sample analysis, certify data, handle unforeseen environmental issues, prepare closure reports for the state and prepare a Remedial Action Plan (RAP), if required. Note: The tank removal contractor is not required to certify closure data nor submit the report to the FDEP.

6. Available Funds:

The RAC contractor should be brought on board now. It is extremely close to the end of the fiscal year. How long will funds be available? It will be necessary to prepare a statement of work (SOW) for the RAC contractor's efforts.

7. Additional Tanks:

Are soil removal efforts being considered at the other tank locations ... 99, 100, 101?

Will the RAC contractor be required for efforts at those sites also?

Will contaminated soils from all of the tanks be commingled?

Memorandum

DATE: 06 OCT. 98

FROM: BEVERLY S. WASHINGTON (CODE 1848)

TO: EMMETT BEERS, BHATE ENVIRONMENTAL ASSOCIATES, INC.

SUBJ: DRAFT CAR ADD FOR NSC FUEL FARM, NAVAL STATION
MAYPORT, DATED SEPTEMBER 29, 1998

1. These are comments on the above subject.

<u>Section #</u>	<u>Comments</u>
	<p>Provide a Table of Contents</p> <p>Include a copy of FDEP's letter responding to the CAR</p> <p>Address each comment in FDEP's letter.</p> <p>Provide a new cover letter for the CAR, dated 12 December 1997, for record purposes. The CAR is entitled 'DRAFT CAR'.</p> <p>Technically FDEP does not review 'Drafts'. The new cover letter will replace the present one ---- same date.</p>
4.0	Type "CONTROL" in title.
5.1 (4 th bullet)	Should be 'exceed' vs 'exceeded'.
6.0 (2 nd bullet)	Modify this paragraph since soils at 10 feet above mean sea level (msl) and below will not be removed during tank removals. The tank foundation at 10 feet above msl will remain in place.
7.0	Review and correct title.
Figure 2	<p>Identify contaminated gw in the legend.</p> <p>Identify corresponding sampling depth for values indicated in data tables for new sampling locations.</p> <p>Show previous sampling data for well # FF-MW- 5. The data on Figure 9 of the CAR did not agree with the data in Table 5 of the CAR.</p>

Memorandum

Figure 5 (New)	Modify Figure 13 of the CAR (Tank 202 Profile) to include new sampling data.
Analytical Report	Sample ID: FF-MW10-SS-9 Please explain the use of Method 3550 for PAH's
Analytical Report	Sample ID: FF-SS-RS-1 Please explain the use of Method 3510 for PAH's

BEVERLY S. WASHINGTON
C/1848, (803) 820- 5581



Bhate Environmental Associates, Inc.
Environmental Engineers & Scientists
1608 13th Avenue, South, Suite 300
Birmingham ■ Alabama ■ 35205
(205) 918-4000
(205) 918-4050 (FAX)

October 30, 1998

Commanding Officer
Environmental Division
Bldg. 191C, N4E4
Naval Station Mayport
Mayport, Florida 32228-0067

Attention: Ms. Cheryl Mitchell

Subject: Addendum to the Contamination Assessment Report
NSC Fuel Farm
Naval Station Mayport
Mayport, Florida
Contract No. N62467-96-0976
BHATE Project No.: 9970082

Dear Ms. Mitchell:

Bhate Environmental Associates, Inc. (BHATE) is pleased to submit an Addendum to the Contamination Assessment Report (CAR) previously sent to the Florida Department of Environmental Protection (FDEP). This addendum report describes activities at the NSC Fuel Farm conducted to address comments about the CAR made by the FDEP.

If you have any questions or need additional information, please contact us at your earliest convenience at 1 (800) 806-4001.

Respectfully submitted,
BHATE ENVIRONMENTAL ASSOCIATES, INC.

Dewey Trapp
Project Geologist

Emmett A. Beers
Senior Project Manager

I:\USR\PROJECTS.BEA\1997\9970082\corr\ADDENDUM TO CAR FUELFARM

Larry D. Schutts
Technical Director
Florida Professional Geologist #497

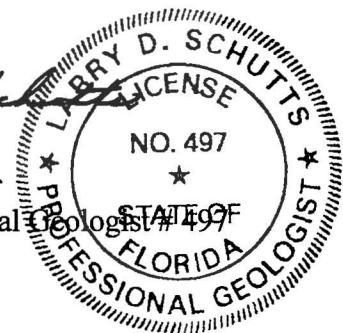


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1.0 BACKGROUND

The assessment site is the NSC Fuel Farm at the Mayport Naval Station in Mayport, Duval County, Florida. The NSC Fuel Farm contains cut and cover bulk fuel storage tanks (Figure 1).

A contamination assessment was conducted at the site between May and October 1997, to determine the source of free petroleum product encountered in monitoring well MPT-16-MWO2S. The affected well lies east of Tank 202 (Figure 1). The results of the contamination assessment concluded that soil and groundwater contamination is essentially localized in an area around Tank 202. The tank and associated piping are the suspected sources of contamination.

A Contamination Assessment Report, dated December 10, 1997, was submitted to the Florida Department of Environmental Protection. Following review of the report, the FDEP issued a letter requesting additional site assessment in the general area around Tank 202. A copy of the letter is included within Appendix A.

2.0 ASSESSMENT ACTIVITIES

Assessment activities conducted at the site included the installation of monitoring wells and the collection of soil and groundwater samples for laboratory analysis. The following is a summary of the site activities.

2.1 Soil Sample Collection

On June 24, 25 and 26, 1998, soil samples were collected at three locations (FF-MW-10, FF-MW-11 and FF-MW-5) adjacent to Tank 202. These were in close proximity to previous soil probe locations GP-19 and GP-25 and to monitoring well MW-5. The soil sample locations are indicated on Figures 1 and 2.

Soil samples were collected at FF-MW-10 and FF-MW-11, during monitoring well installation, using a 24-inch split-spoon sampler and hollow stem augers. Soil samples were collected continuously at FF-MW-10 and at five-foot intervals in FF-MW-11. One sample was collected from a predetermined depth at MW-5. In that case, the sample was taken with a Geoprobe soil sampler, equipped with stainless steel liners.

Following retrieval, the soil samples were examined for visual and olfactory evidence of petroleum hydrocarbons. They were transferred into one-quart decontaminated glass jars, covered with aluminum foil, and allowed to stabilize for five minutes. Volatile organic concentrations were assessed by organic vapor analyzer (OVA) headspace screening techniques. A flame ionization detector (FID) was used in the field to screen the soil gas headspace of each sample. Carbon filters were used with the FID, to aid in distinguishing naturally occurring methane from hydrocarbon vapors.



Soil samples were selected for laboratory analyses, based on FID screening results, from depths of nine feet at FF-MW-10 (FF-MW10-SS-9), nineteen feet at FF-MW-11 (FF-MW11-SS-19), and nine feet at FF-MW-5 (FF-MW5-SS-9). Soil samples submitted for analyses were placed into laboratory supplied clean glass jars, sealed with Teflon-lined lids, and cooled to approximately 4°C. The samples were then delivered, under chain of custody, to Specialized Assays Laboratory in Nashville, Tennessee. They were analyzed for the following parameters:

- Benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8021B.
- Naphthalene and the 15 method-listed PAHs by EPA Method 8100.
- Florida Petroleum Residual Organics (FL-PRO) by Method TRPH (FDEP).

2.2 Monitoring Well Installation and Development

Monitoring wells were installed at two locations in close proximity to previous soil probes GP-19 and GP-25. The well locations are shown on Figures 1 and 3. Monitoring well construction logs are presented in Appendix A. Pertinent data on the monitoring wells can also be found in Table 1.

The wells were constructed of 2-inch diameter flush-threaded Schedule 40 PVC pipe, with ten (10) feet of 0.01- inch slotted screen. Construction procedures consisted of drilling the augers to a depth within groundwater adequate for monitoring well screen placement. The casing and screen were placed inside the augers, driving the end plug from the augers. The annular space around the screen was filled with 20/30 grade filter sand, as the augers were removed. The sand pack extended to approximately 0.5 feet above the top of the well screen. The upper surface of the sand pack was sealed with bentonite pellets. The thickness of the bentonite seal was approximately 2.0 feet. The bentonite pellets were hydrated with potable water, prior to introducing grout into the borehole. The annular space above the bentonite seal was grouted to the ground surface. A steel manhole assembly was placed over each completed well and secured in the grout column. The PVC well casings were fitted with lockable expansion caps, and the caps were secured with padlocks. A flush mounted, two foot concrete pad was completed at the ground surface of each well.

Representative samples of auger cuttings were collected during drilling activities and an OVA headspace analysis was conducted on each sample. Results of the analyses were utilized in soil disposal. Soils with representative headspace analyses less than 50 ppm were spread on site, in the immediate area of the well. Soils with headspace analytical results greater than 50 ppm were contained within 55-gallon drums for disposal off site.

The monitoring wells were developed by purging with a 2-inch submersible Geopump, which was decontaminated prior to well development. The wells were developed until they were relatively clear of fine-grained sediment.



2.3 Groundwater Sampling

On June 26, 1998, groundwater samples were collected from newly installed monitoring wells FF-MW-10 and FF-MW-11. Prior to sample collection, fluids from each monitoring well were examined for the presence of separate phase petroleum hydrocarbons (free product). To ensure representative groundwater samples, the wells were purged prior to sampling. A peristaltic pump and decontaminated Teflon tubing were used to purge each well. A slow purge quiescent technique was employed. Purging continued until five well volumes had been removed from each well.

The total lead samples were collected utilizing the peristaltic pump. All other groundwater samples were collected using decontaminated Teflon bailers. Groundwater samples were placed in appropriate containers, cooled on wet ice, and transported under chain of custody to Specialized Assays Laboratory. Samples were analyzed for the following:

- Benzene, toluene, ethylbenzene and xylenes (BTEX) and MTBE by EPA Method 602.
- Naphthalene and the 15 method-listed PAHs by EPA Method 610.
- 1,2-dichloroethane and listed Priority Pollutant Volatile Organic Halocarbons by EPA Method 601/602.
- 1,2-dibromoethane (EDB) by EPA Method 601.
- Florida Petroleum Residual organics (FL-PRO) - Method TRPH (FDEP).
- Total Lead by EPA Method 6010A.

The glass PAH sample container collected for well FF-MW-11 was broken during shipment to the laboratory and an additional sample was collected on June 30, 1998.

Groundwater evacuated during development and sampling of the monitoring wells was contained in 55-gallon drums. The water was disposed as non-hazardous petroleum contaminated waste.

2.4 Groundwater Flow Direction

All wells were located with respect to horizontal and vertical data. The survey was supervised and certified by a Registered Land Surveyor. All elevations refer to mean sea level (msl).

Groundwater levels were measured within each of the monitoring wells at the site on June 26, 1998. Water-level measurements were obtained with an electronic water-level indicator. They were taken to the nearest 0.01-foot and are referenced to a point on top of the well casing. Relative groundwater elevations were calculated and are summarized with measurements from previous dates in Table 1.



The groundwater levels were used to prepare a water-table contour map (Figure 4). Based on the data shown on the contour map, the primary direction of groundwater movement is to the north and northeast, toward the St. Johns River. That direction is consistent with previous flow direction determinations.

3.0 RESULTS OF THE CONTAMINATION ASSESSMENT

3.1 Soil Analytical Results

Results of the OVA headspace analysis of soil samples taken during the assessment are provided in Table 2. Methane-corrected organic vapor concentrations greater than 50 parts per million (ppm) were measured throughout the sampling interval at FF-MW-10. No headspace concentrations were detected at FF-MW-11.

Results of the laboratory analysis did not detect PAH constituents in any of the soil samples. Ethylbenzene and Total Xylenes were detected in soil samples from FF-MW-5 and FF-MW-10, at concentrations below applicable FDEP regulatory levels. BTEX was not detected at FF-MW-11 above the laboratory method detection limit. An elevated FL-PRO TRPH value was detected in soils taken from boring FF-MW-10. The TRPH value at FF-MW-5 was below the regulatory level of 2500 ppm for soil. TRPH was not detected at FF-MW-11. Soil sample laboratory analytical results are presented in Table 3 and on Figure 2. Copies of the laboratory analytical results and chain-of-custody records are provided in Appendix B.

3.2 Groundwater Analytical Results

Summaries of laboratory analytical results for groundwater samples collected from FF-MW-10 and FF-MW-11 are presented in Table 4 and on Figure 3. Copies of the laboratory analytical reports and chain-of-custody records are provided in Appendix B.

The results did not indicate BTEX or MTBE above the laboratory detection limits. Naphthalene was detected above the FDEP cleanup target level of 20 parts per billion (ppb), in the sample collected from FF-MW-10. The methylnaphthalene constituents detected in both FF-MW-10 and FF-MW-11 are not regulated under groundwater cleanup criteria.

Neither of the TRPH concentrations exceeded the regulatory cleanup criterion of 5 ppm. Concentrations of total lead in groundwater samples collected from these wells were less than the laboratory detection limit.

Fluids in monitoring wells FF-MW-10 and FF-MW-11 were examined for free petroleum product on June 26, 1998, prior to sample collection, and again on June 30, 1998. There was no measurable product thickness in the wells, on either occasion.



Petroleum hydrocarbons in the immediate vicinity of Tank 202 and downgradient areas affect site groundwater. The estimated extent of impacted groundwater is illustrated in Figure 3. Known concentrations of regulated hydrocarbon constituents are generally below levels of concern. Free petroleum product was not observed in the newly installed wells FF-MW-10 and FF-MW-11, or in MPT-16-MWO2S, which had originally contained free product.

4.0 QUALITY ASSURANCE/QUALITY CONTROL

BHATE maintained a stringent QA/QC program for all activities, during data acquisition through report preparation. All appropriate Geoprobe drilling and sampling equipment was decontaminated by appropriate FDEP QA/QC procedures. Auger drilling equipment was steam cleaned, prior to drilling and between each boring. All soil and groundwater sampling equipment was decontaminated with laboratory-grade detergent, appropriate solvent and an alcohol wash. It was then rinsed with deionized and analyte-free water, before each sample collection.

Equipment rinsate samples were collected during soil and groundwater sample collection. Sample FF-SS-RS1 was collected from soil sampling equipment. Sample FF-MW-RS1 was collected from groundwater sampling equipment.

5.0 SUMMARY AND CONCLUSIONS

5.1 Summary

The following points summarize significant site conditions, based on the results of field and laboratory investigations:

- Corrected soil organic headspace concentrations greater than 50 ppm give evidence of excessive kerosene group contamination. Such concentrations were found in soil samples collected above the groundwater capillary fringe at well location FF-MW-10. Headspace concentrations were not detected in soil samples collected at FF-MW-11.
- Ethylbenzene and xylenes were the only BTEX constituents detected in the soil samples. They were found in samples FF-MW10-SS-9 and FF-MW5-SS-9, collected east of Tank 202. The concentrations were below regulatory cleanup target levels. PAH constituents were not detected in any of the samples. Soil sample FF-MW10-SS-9 contained a FL-PRO concentration above the applicable FDEP cleanup target level.
- Naphthalene was detected in groundwater collected from monitoring well FF-MW-10, at a concentration above the FDEP guidance level. BTEX was not detected in



any of the wells.

- TRPH did not exceed the regulatory level of 5 ppm in either FF-MW-10 or FF-MW-11.
- Free petroleum product was not present in either the newly installed monitoring wells in June 1998.
- Total lead was not detected in groundwater samples taken from FF-MW-10 or FF-MW-11. A quiescent sampling technique was used.
- Groundwater measurements were obtained from all of the wells at the site. The direction of groundwater movement appears to be to the north and northeast, toward the St. Johns River and is consistent with previous flow direction determinations.

5.2 Conclusions

- Soil and groundwater contamination is essentially localized in extent to an area around Tank 202. The tank and associated piping remain the suspected sources of contamination.
- FID headspace analyses of samples from above the capillary fringe exceeded the Kerosene Group excessively contaminated soil limit of 50 ppm, at the location of monitoring well FF-MW-10. This affirms previous findings at GP-25 and FF-MW-5. The shallow impact at FF-MW-10 suggests a near-surface release.
- Analyses of site monitoring well samples indicate that groundwater around Tank 202 is not impacted by petroleum hydrocarbons to concentrations greater than applicable FDEP Cleanup Target Levels, except at MPT-16-MW02S (41ppm TRPH) and FF-MW-10 (37 ppb Naphthalene).

6.0 RECOMMENDATIONS

On the basis of findings and conclusions discussed above, Bhate recommends the following:

- Periodic sampling and analysis of groundwater from existing site wells, in order to more firmly establish groundwater quality conditions and the degree to which free product may be distributed downgradient of Tank 202 sources.
- Preparation of a Remedial Action Plan, to address the treatment of soils affected to levels in excess of regulatory limits.



7.0 CLOSING REMARKS

This Addendum to the Contamination Assessment Report has been prepared on behalf of the Department of the Navy, Southern Division for specific application to the subject site. Future environmental conditions at the site can change, subject to changes in operations and land usage. The opinions and findings of this report reflect the conditions apparent at the time the work was performed. New regulations, changes in surrounding land use, altered geologic conditions and other factors may also result in changed site conditions.

The work described in this report has been conducted in accordance with current FDEP UST regulations and with standard industry practice. No other warranty is implied or expressed.



TABLE 1
MONITORING WELL CONSTRUCTION DATA AND WATER LEVEL DATA
CONTAMINATION ASSESSMENT REPORT
NSC FUEL FARM
NAVAL STATION MAYPORT

WELL NO.	DATE	TOTAL DEPTHS OF WELL BLS (ft.)	TOP OF CASING BLS (ft.)	SURVEYED TOP OF CASING ELEVATION (MSL)*	SCREENED INTERVAL DEPTH BLS (ft.)	DEPTH OF WATER FROM TOP OF CASING (ft.)	ELEVATION OF WATER TABLE (MSL)*
FF-MW-1	6/26/98	18.8	0.17	16.37	8.62-18.12	14.93	1.44
	10/8/97					14.46	1.81
	7/16/97					14.65	1.72
	6/18/97					14.19	2.18
FF-MW-2	6/26/98	17.4	0.21	18.46	7.37-16.87	13.17	5.29
	10/8/97					12.83	5.63
	7/16/97					NR	NR
	6/18/97					12.39	6.07
FF-MW-3	6/26/98	14.30	0.24	10.25	4.09-13.59	9.07	1.18
	10/8/97					9.18	1.07
	7/16/97					9.31	.94
	6/18/97					8.41	1.84
FF-MW-4	6/26/98	14.90	0.25	12.15	3.81-13.31	10.55	1.60
	10/8/97					10.11	2.04
	7/16/97					10.28	1.87
	6/18/97					9.86	2.29
FF-MW-5	6/26/98	15.2	0.25	11.83	4.99-14.49	10.56	1.27
	10/8/97					10.42	1.41
	7/16/97					10.65	1.18
	6/18/97					9.78	2.05
FW-MW-6	6/26/98	14.96	0.21	9.91	3.6-13.10	8.54	1.37
	10/8/97					9.02	.89
	7/16/97					9.14	.77
	6/18/97					8.19	1.72
FF-MW-7	6/26/98	15.05	0.17	9.43	4.84-14.34	8.30	1.13
	10/8/97					8.34	1.09
	7/16/97					8.50	0.93
	6/18/97					7.62	1.81
FF-MW-8	6/26/98	15.17	0.17	8.98	4.96-14.46	7.85	1.13
	10/8/97					7.71	1.27
	7/16/97					7.78	1.20
	6/18/97					7.18	1.80

TABLE 1 (CONTINUED)
MONITORING WELL CONSTRUCTION DATA AND WATER LEVEL DATA
CONTAMINATION ASSESSMENT REPORT
NSC FUEL FARM
NAVAL STATION MAYPORT

WELL NO.	DATE	TOTAL DEPTHS OF WELL BLS (ft.)	TOP OF CASING BLS (ft.)	SURVEYED TOP OF CASING ELEVATION (MSL)*	SCREENED INTERVAL DEPTH BLS (ft.)	DEPTH OF WATER FROM TOP OF CASING (ft.)	ELEVATION OF WATER TABLE (MSL)*
FF-MW-9	6/26/98	24.79	0.21	10.08	21.98-24.29	8.58	1.50
	10/8/97					8.99	1.09
	7/16/97					9.15	0.93
	6/18/97					8.26	1.82
FF-MW-10	6/26/98	15.0	0.09	13.31	14.7-15.2	12.02	1.29
FF-MW-11	6/26/98	25.0	0.17	21.45	15.2-24.2	20.03	1.42
MPT16MW02S	6/26/98	15.50	0.28	10.74	5.0-15.0	9.28	1.46
	10/8/97					9.46	1.28
	7/16/97					9.73	1.01
	6/18/97					9.91	0.83
MPT16MW03S	6/26/98	15.50	0.40	11.27	5.0-15.0	10.03	1.24
	10/8/97					9.68	1.59
	7/16/97					9.85	1.42
	6/18/97					9.32	1.95
MPT-8-PO1	6/26/98	15.0	NR	12.89**	10.0-15.0	7.31	5.58
	10/8/97					6.44	6.45
MPT-9-MW03	10/8/97	15.0	NR	11.49**	5.0-15.0	10.32	1.17
MPT-16-MW01I	6/26/98	30.0	NR	12.84**	25-30.0	10.77	2.07
	10/8/97					10.96	1.88
MPT-9-MW01S	6/26/98	20.0	NR	14.39**	5.0-20.0	12.81	1.58
	10/8/97					12.45	1.93

Notes:

NR = Not recorded

BLS = Below Land Surface

*= Elevations referenced to MSL (Mean Sea Level)

**= Elevations obtained from previous reports by others

Water level measurements were obtained on June 3, July 16 and October 8, 1997

TABLE 2
SUMMARY OF SOIL HEADSPACE ANALYSES
NSC FUEL FARM
NAVAL STATION MAYPORT
MAYPORT, FLORIDA

[illegible]

TABLE 3
SUMMARY OF SOIL ANALYTICAL RESULTS
NSC FUEL FARM

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA Method 8100).....in mg/kg

	FF-MW5-SS-9	FF-MW10-SS-9	FF-MW11-SS-19	Regulatory Levels
DATE	6/26/98	6/24/98	6/25/98	
PARAMETER				
Naphthalene	BDL	BDL	BDL	8600
Acenaphthene	BDL	BDL	BDL	22000
Anthracene	BDL	BDL	BDL	290000
Fluoranthene	BDL	BDL	BDL	45000
Fluorene	BDL	BDL	BDL	24000
Pyrene	BDL	BDL	BDL	40000
Benzo(a)anthracene	BDL	BDL	BDL	5.1
Benzo(a)pyrene	BDL	BDL	BDL	0.5
Benzo(b)fluoranthene	BDL	BDL	BDL	5.0
Benzo(k)fluoranthene	BDL	BDL	BDL	52
Chrysene	BDL	BDL	BDL	490
Dibenzo(a,h)anthracene	BDL	BDL	BDL	0.5
Indeno(1,2,3-cd)pyrene	BDL	BDL	BDL	5.2
Acenaphthylene	BDL	BDL	BDL	11000
Benzo(g,h,i)perylene	BDL	BDL	BDL	45000
Phenanthrene	BDL	BDL	BDL	29000

TABLE 3- (Continued)
SUMMARY OF SOIL ANALYTICAL RESULTS
NSC FUEL FARM

PURGEABLE AROMATICS (EPA Method 8021B).....in mg/kg

	FF-MW5-SS-9	FF-MW10-SS-9	FF-MW11-SS-19	Regulatory Levels
DATE	6/26/98	6/26/98	6/26/98	
PARAMETER				
Benzene	BDL	BDL	BDL	1.5
Toluene	BDL	BDL	BDL	2000
Ethylbenzene	0.1050	0.5500	BDL	240
Total Xylenes	0.5300	2.650	BDL	290

PETROLEUM HYDROCARBONS (Florida FL-PRO).....in mg/kg

TRPH	523	5980	BDL	2500
------	-----	------	-----	------

Notes:

BDL = Below Detection Limit
Shaded values indicate value exceeding regulatory standard

TABLE 4
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
NSC FUEL FARM
NAVAL STATION MAYPORT
MAYPORT, FLORIDA

POLYNUCLEAR AROMATIC HYDROCARBONS (EPA Method 610).....in µg/l

PARAMETER	FF-MW-10	FF-MW-11	Regulatory Levels
DATE	6/26/98	6/30/98	
Naphthalene	37.0	BDL	20
2-Methylnaphthalene	81.0	BDL	
1-Methylnaphthalene	67.0	16.0	
Acenaphthylene	BDL	BDL	210
Acenaphthene	BDL	BDL	20
Fluorene	BDL	BDL	280
Phenanthrene	BDL	BDL	210
Anthracene	BDL	BDL	2100
Fluoranthene	BDL	BDL	280
Pyrene	BDL	BDL	210
Benzo(a)anthracene	BDL	BDL	0.2
Chrysene	BDL	BDL	5
Benzo(b)Fluoranthene	BDL	BDL	0.2
Benzo(k)Fluoranthene	BDL	BDL	0.5
Benzo(a)pyrene	BDL	BDL	0.2

BDL = Below Detection Limit
Shaded values indicate value exceeding regulatory standard
RS = Regulatory Standard
NR = Not Regulated

TABLE 4 (CONTINUED)
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
NSC FUEL FARM
NAVAL STATION/MAYPORT
MAYPORT, FLORIDA

POLYNUCLEAR AROMATIC HYDROCARBONS (Continued)

Date	6/26/98	6/26/98	
PARAMETER	FF-MW-10	FF-MW-11	Regulatory Levels
Dibenzo(a,h)Anthracene	BDL	BDL	BDL
Indeno(1,2,3-c,d)pyrene	BDL	BDL	BDL
Benzo(g,h,i)perylene	BDL	BDL	
Date	6/26/98	6/26/98	

BTEX COMPOUNDS (METHOD 8020)in µg/l

Benzene	BDL	BDL	0.2
Ethylbenzene	BDL	BDL	700
Toluene	BDL	BDL	1,000
Total Xylenes	BDL	BDL	10,000
MTBE	BDL	BDL	

Metals (METHOD 239.2)in mg/l

LEAD	BDL	BDL	0.015
------	-----	-----	-------

PETROLEUM HYDROCARBONS (FL-PRO)in mg/l

TRPH	2.810	1.110	5
------	-------	-------	---

Notes:
BDL = Below Detection Limit
Shaded values indicate value exceeding regulatory standard
RS = Regulatory Standard
NR = Not Regulated

TABLE 4 (CONTINUED)
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
NSC FUEL FARM
NAVAL STATION MAYPORT
MAYPORT, FLORIDA

POLYNUCLEAR AROMATIC HYDROCARBONS (Continued)

Date	6/26/98	6/26/98	
PARAMETER	FF-MW-10	FF-MW-11	Regulatory Levels
Dibenzo(a,h)Anthracene	BDL	BDL	BDL
Indeno(1,2,3-c,d)pyrene	BDL	BDL	BDL
Benzo(g,h,i)perylene	BDL	BDL	
Date	6/26/98	6/26/98	

BTEX COMPOUNDS (METHOD 8020)in µg/l

Benzene	BDL	BDL	0.2
Ethylbenzene	BDL	BDL	700
Toluene	BDL	BDL	1,000
Total Xylenes	BDL	BDL	10,000
MTBE	BDL	BDL	

Metals (METHOD 239.2)in mg/l

LEAD	BDL	BDL	0.015
------	-----	-----	-------

PETROLEUM HYDROCARBONS (FL-PRO)in mg/l

TRPH	2.810	1.110	5
------	-------	-------	---

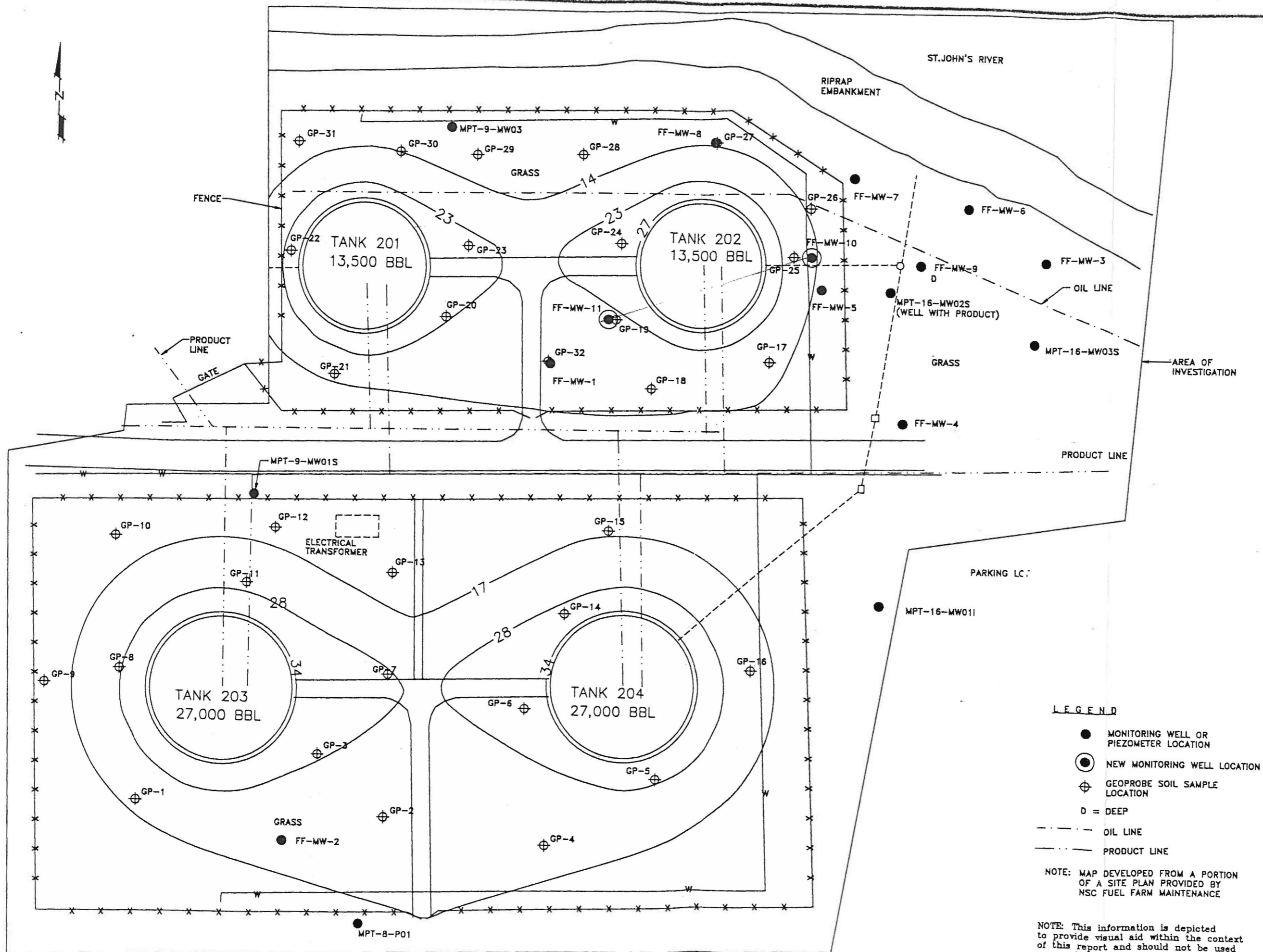
Notes:
BDL = Below Detection Limit
Shaded values indicate value exceeding regulatory standard
RS = Regulatory Standard
NR = Not Regulated

TABLE 4 (CONTINUED)
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
NSC FUEL FARM
NAVAL STATION MAYPORT
MAYPORT, FLORIDA

VOLATILE ORGANICS (EPA Method 601/602) . . . in µg/l

Date	6/26/98	6/26/98	
PARAMETER	FF-MW-10	FF-MW-11	Regulatory Levels
Chlorobenzene	BDL	BDL	--
1,2-Dichlorobenzene	BDL	BDL	--
1-3-Dichlorobenzene	BDL	BDL	--
1,4-Dichlorobenzene	BDL	BDL	--
Bromodichloromethane	BDL	BDL	--
Bromoform	BDL	BDL	100
Bromomethane	BDL	BDL	--
Carbon tetrachloride	BDL	BDL	5.0
Chloroethane	BDL	BDL	--
2-Chloroethylvinylether	BDL	BDL	--
Chloroform	BDL	BDL	0.1
Chloromethane	BDL	BDL	--
Dibromochloromethane	BDL	BDL	--
Ethylene Dibromide	BDL	BDL	0.05
Vinyl chloride	BDL	BDL	2.0

BDL = Below Detection Limit
Shaded values indicate value exceeding regulatory standard
RS = Regulatory Standard
NR = Not Regulated



Contamination Assessment Report
NSC FUEL FARM
Naval Station Mayport
Mayport, Florida

SOIL BORING AND MONITORING WELL SAMPLING LOCATIONS

PROJECT NO.	SCALE	DATE	DRAWN BY:	
9970082	APPROX. 1"=65'	4/17/97	CLL	
			DRAWING NO:	82-F5

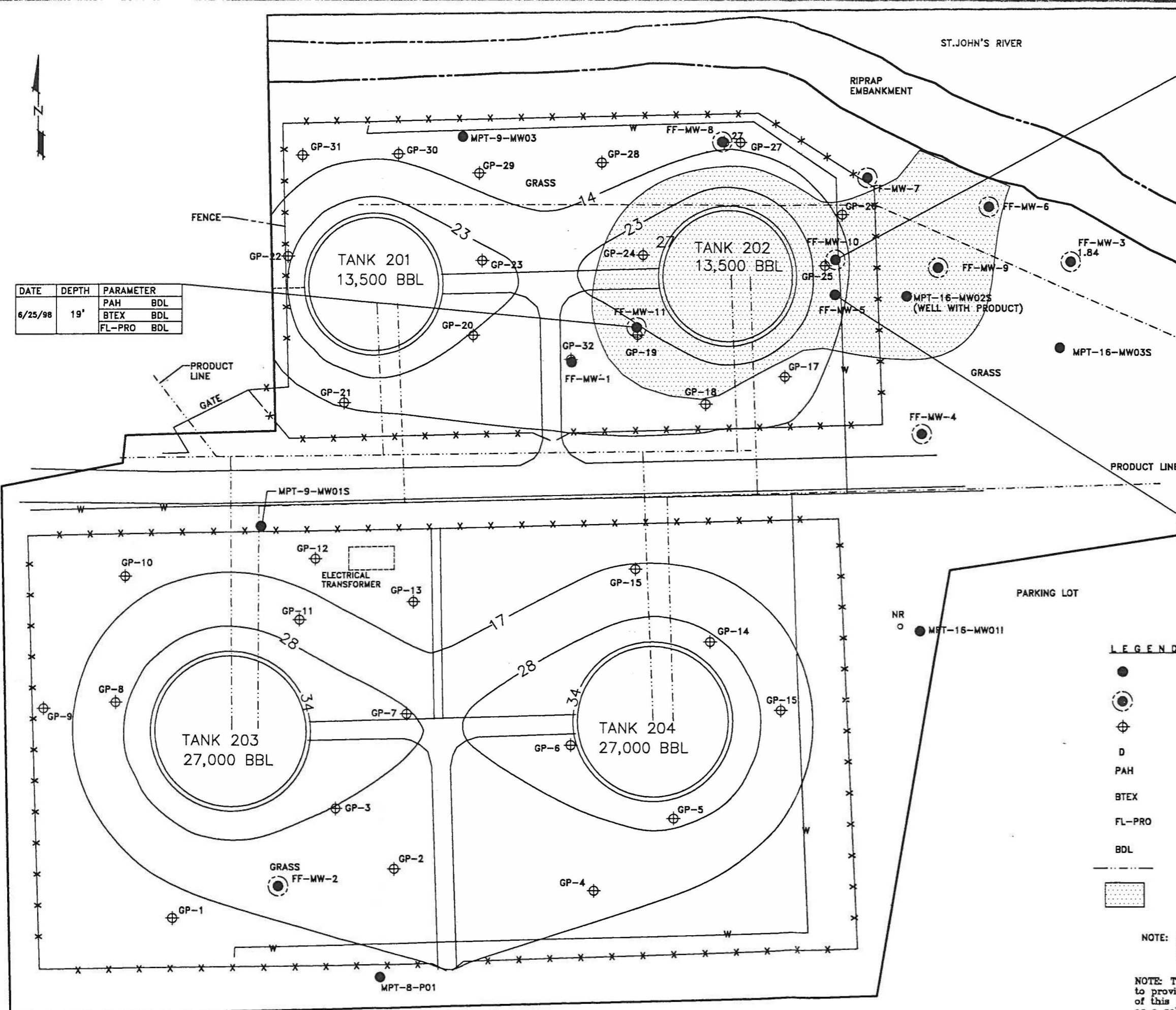
Figure 1

BEA
Bhole Environmental Associates, Inc.
Environmental Engineers & Scientists

DATE	DEPTH	PARAMETER
6/25/98	19'	PAH BDL
		BTEX BDL
		FL-PRO BDL

DATE	DEPTH	PARAMETER
6/24/98	9'	PAH BDL
		BTEX ETHYLBENZENE 0.55 XYLENE 2.65
		FL-PRO 5,980

DATE	DEPTH	PARAMETER
6/25/98	9'	PAH BDL
		BTEX ETHYLBENZENE 0.105 XYLENE 0.53
		FL-PRO 523
6/12/97	4'-6'	FL-PRO BDL
6/12/97	8'-10'	FL-PRO 5,900



LEGEND

- PRE-EXISTING MONITORING WELL OR PIEZOMETER LOCATION
- NEW MONITORING WELL LOCATION
- ⊕ GEOPROBE SOIL SAMPLE LOCATION
- D DEEP
- PAH POLYNUCLEAR AROMATIC HYDROCARBONS IN PARTS PER MILLION (mg/l)
- BTEX BENZENE, TOLUENE, ETHYLBENZENE, XYLENES, MTBE IN PARTS PER MILLION (mg/l)
- FL-PRO FL-PRO IN PARTS PER MILLION (mg/l)
- BDL BELOW DETECTION LIMIT
- - - PRODUCT LINE
- APPROXIMATE AREA OF POTENTIALLY AFFECTED GROUNDWATER

NOTE: MAP DEVELOPED FROM A PORTION OF A SITE PLAN PROVIDED BY NSC FUEL FARM MAINTENANCE

NOTE: This information is depicted to provide visual aid within the context of this report and should not be used as a sole reference in precise dimensioning

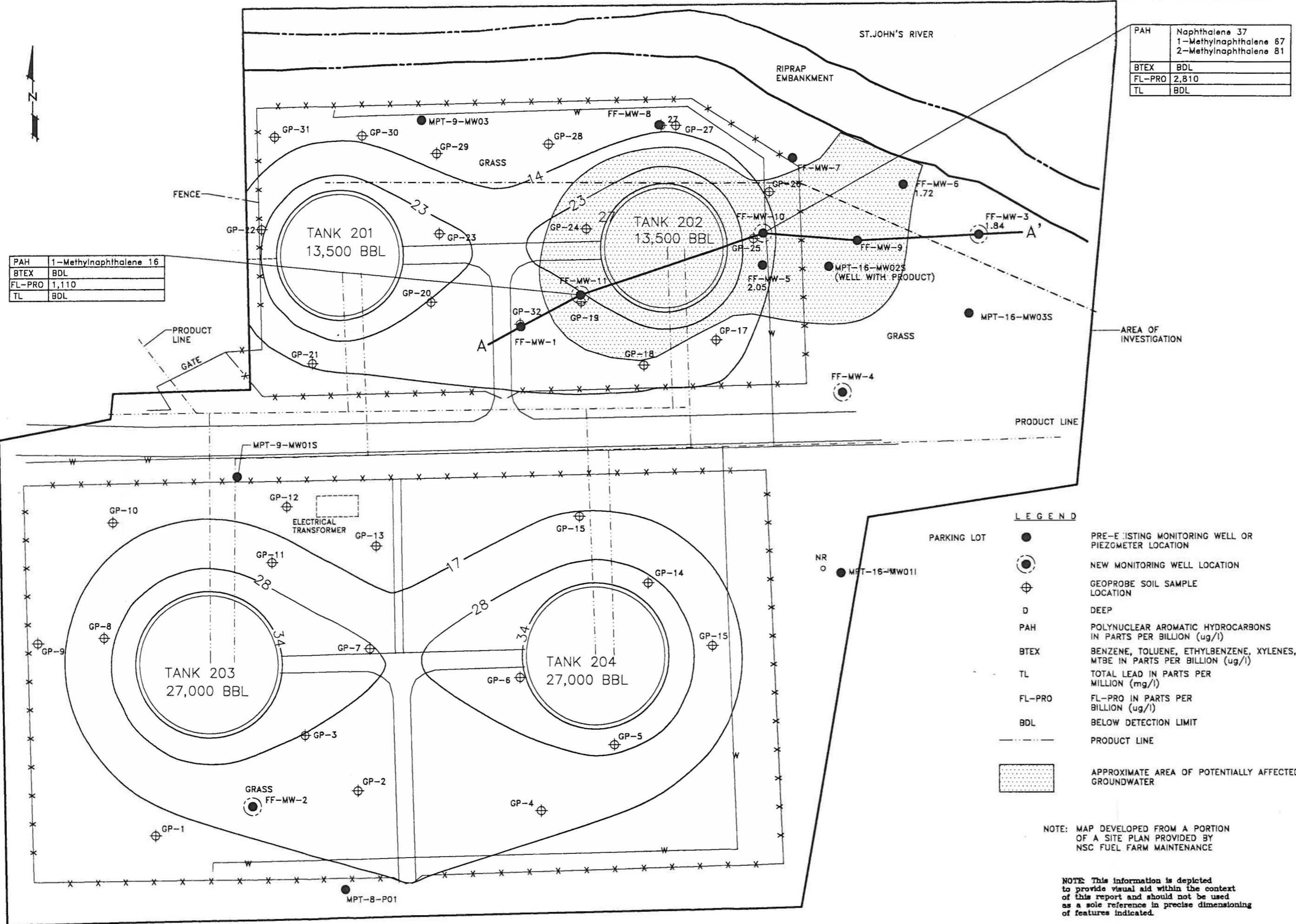
SOIL ANALYTICAL RESULTS



Department of the Navy
Naval Station Mayport
Mayport, Florida

PROJECT NO.	9970082
SCALE	Approx. 1"=65'
DATE	8/3/98
DRAWN BY:	-
DRAWING NO.	82-F2A

Figure 2



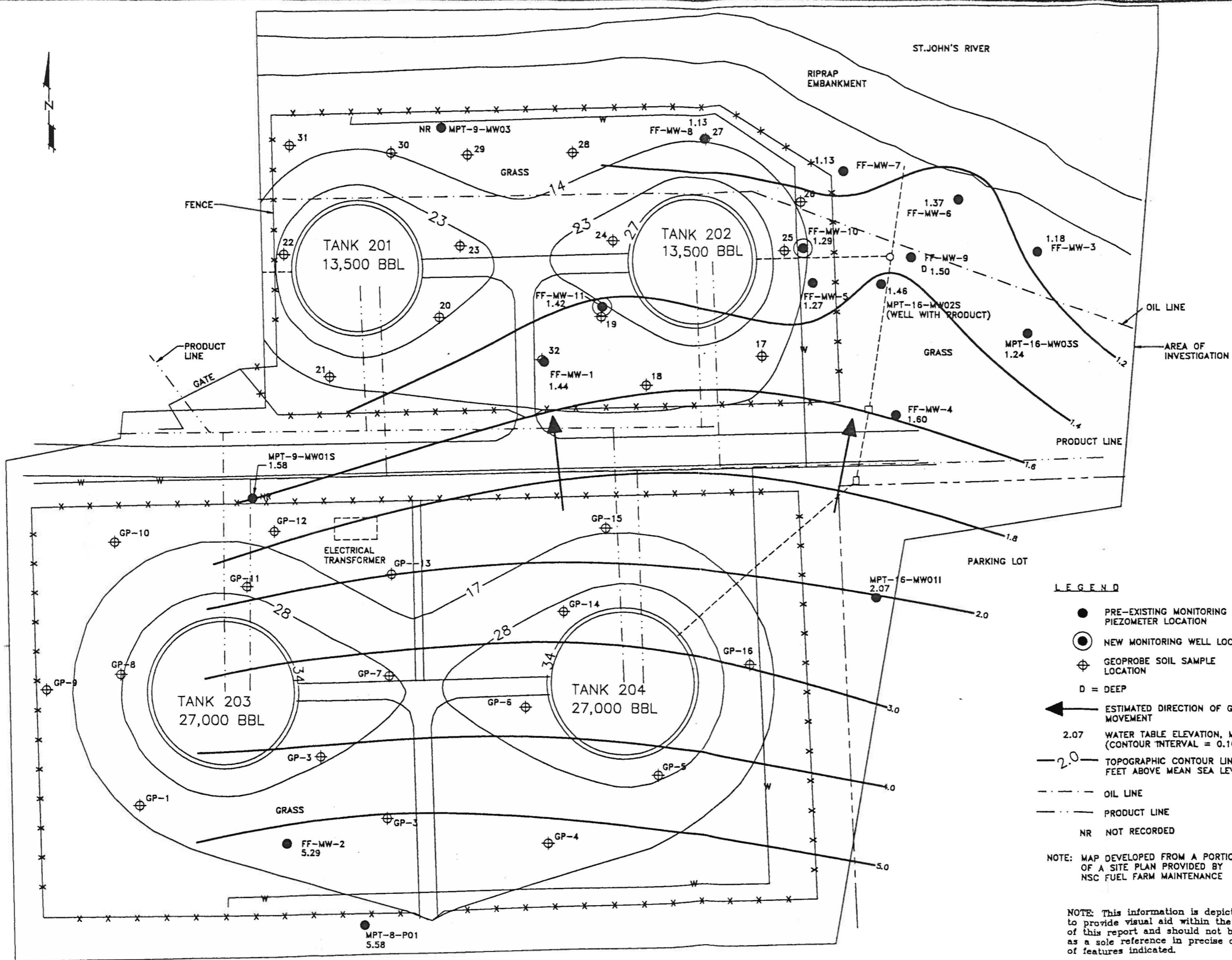
MONITORING WELL GROUNDWATER ANALYTICAL RESULTS

BEA
Bhate Environmental Associates, Inc.
Environmental Engineers & Scientists

Department of the Navy
Naval Station Mayport
Mayport, Florida

PROJECT NO. 9970082
SCALE Approx. 1"=65'
DATE 8/3/98
DRAWN BY: -
DRAWING NO. 82-F3A

Figure 3



WATER TABLE CONTOUR MAP
JUNE 26, 1998

PROJECT NO.	SCALE	DATE	DRAWN BY:	
9970082	APPROX. 1"=65'	4/17/97	CLL	DRAWING NO:
				82-FA



LAWTON CHILES
Governor

Department of Environmental Protection

Twin Towers Building
2800 Bluff Stone Road
Tallahassee, Florida 32309-2400

Virginia B. Wetherell
Secretary

January 23, 1998

Ms. Beverly Washington
Department of the Navy, Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive, PO Box 190010
North Charleston, SC 29419-9010

file: car_nacl.doc

RE: Contamination Assessment Report NSC Fuel Farm, Naval Station Mayport, Mayport, FL

Dear Ms. Washington:

I have reviewed the above document dated November 19, 1997 (received December 15, 1997). The report is generally well prepared; however, the following comments should be adequately addressed:

1. Sites GP-19 and GP-25 (Figure 9) exhibited high TPH values (1,100 and 14,000 ppm respectively), indicating the possible presence of free product. A shallow monitoring well or piezometer should be installed in the close proximity of both of these locations. They should be evaluated for the presence of free product or in the absence of free product, sampled for the analysis of volatile and semivolatile petroleum constituents.
2. At least three soil samples should be collected and analyzed for volatile organic aromatics and PAHs. Some of these may be collected during the installation of monitoring wells or piezometers. The soil samples should be collected from areas with high, medium and low screening results for the site.
3. Monitoring well MW02S, on Figure 12, should be identified as exhibiting 41 ppm TPH.
4. Please present the results of this additional assessment as a CAR Addendum with updated figures, tables and revised conclusions and recommendations, as necessary. You may use a letter format for the Addendum if you desire. Please insure that the document is properly signed and sealed according to Florida regulations.

Thank you for the opportunity to review this document. For your further information, I am enclosing a copy of the new Chapter 62-770, F.A.C. which addresses petroleum contaminated sites. If you have any questions or need any additional information, please feel free to contact me at 850-921-4230.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.



Bhate Environmental, Inc.
Environmental Engineers & Scientists

MONITORING WELL LOG

BORING NO: FF-MW-10

PROJECT NO: 9970082

PROJECT NAME: NAVSTA MAYPORT

CLIENT: U.S. NAVY

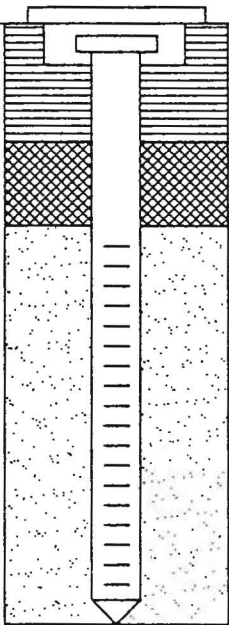
PROJECT LOCATION: FUEL FARM

DRILLING MTHD: 4 1/2 INCH ID HOLLOW STEM AUGER

SAMPLE MTHD: 24 INCH GEOPROBE SAMPLER

DATE STARTED: 6/24/98 DATE FINISHED: 6/24/98

ENGINEER/GEOLOGIST: D. TRAPP

ELEV.	LITHOLOGIC DESCRIPTION	DEPTH. (FT.)	SAMPLE	FL-PRO RESULTS	WATER LEVEL	WELL SECTION	ANNULAR AND WELL CONSTRUCTION MATERIALS
							FLUSH MOUNTED COVER WITH WATER TIGHT LOCKING CAP
	Light brown, fine to medium sand with shell fragments, grassed at surface	0.0					Approximately 3.0 feet of cement grout
	Gray, loose, dry, fine to coarse sand with shell fragments	5.0					Well Casing consist of a 2-inch diameter Schedule 40 PVC Section
							Approximately 2.0 feet thick Bentonite Seal
		10.0		5980			Sand packed Material of 20/30 gradation
					6/24/98		Well Screen Consists of a 10-foot section Schedule 40 0.010 inch factory slotted screen (2-inch diameter)
	BORING TERMINATED @ 15 FEET BELOW GROUND SURFACE	15.0					
		20.0					
		25.0					
		30.0					

BOTTOM OF TEST BORING: 15.0' BGS

BGS = BELOW GROUND SURFACE

BDL = BELOW DETECTION LIMIT

MONITORING WELL LOG

BORING NO: FF-MW-11

PROJECT NO: 9970082

PROJECT NAME: NAVSTA MAYPORT

CLIENT: U.S. NAVY

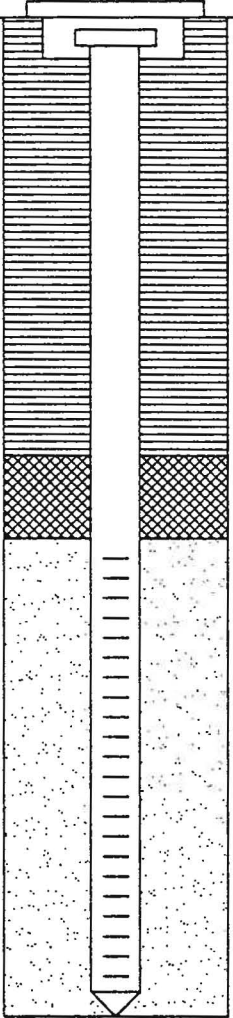
PROJECT LOCATION: FUEL FARM

DRILLING MTHD: 4 1/2 INCH ID HOLLOW STEM AUGER

SAMPLE MTHD: 24 INCH GEOPROBE SAMPLER

DATE STARTED: 6/25/98 DATE FINISHED: 6/25/98

ENGINEER/GEOLOGIST: D. TRAPP

ELEV.	LITHOLOGIC DESCRIPTION	DEPTH. (FT.)	SAMPLE	FL-PRO RESULTS	WATER LEVEL	WELL SECTION	ANNULAR AND WELL CONSTRUCTION MATERIALS
							FLUSH MOUNTED COVER WITH WATER TIGHT LOCKING CAP
	Light brown, fine to medium sand with shell fragments, grassed at surface	0.0					Approximately 11.0 feet of cement grout
		5.0					Well Casing consist of a 2-inch diameter Schedule 40 PVC Section
		10.0					Approximately 2.0 feet thick Bentonite Seal
		15.0					Sand packed Material of 20/30 gradation
	Light brown, dry, fine to coarse sand with shell fragments, occasional dark brown staining.	20.0					Well Screen Consists of a 10-foot section Schedule 40 0.010 inch factory slotted screen (2-inch diameter)
	3 inches of moist, light gray fine sand, no odor.	25.0		BDL	8/26/98		
	Median gray, wet, fine to coarse sand with shell fragments (slight petroleum odor).	30.0					
	BORING TERMINATED @ 25 FEET BELOW GROUND SURFACE						
BOTTOM OF TEST BORING: 25.0' BGS							
BGS = BELOW GROUND SURFACE BDL = BELOW DETECTION LIMIT							



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

STATE ENVIRONMENTAL, INC. 5896

608 13TH AVENUE SOUTH
BIRMINGHAM, AL 35205

Lab Number: 98-A75702
Sample ID: FF-MW5-SS-9
Sample Type: Soil
Site ID:

Project: 9970082
Project Name: MAYPORT NAUSTIA
Sampler: DEWEY TRAPP

Date Collected: 6/26/98
Time Collected: 12:25
Date Received: 6/30/98
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	ND	mg/kg	0.0500	0.0010	50	7/ 9/98	5:59	Ciesielski	8021B	5777
Toluene	ND	mg/kg	0.0500	0.0010	50	7/ 9/98	5:59	Ciesielski	8021B	5777
Ethylbenzene	0.1050	mg/kg	0.0500	0.0010	50	7/ 9/98	5:59	Ciesielski	8021B	5777
Xylenes, total	0.5300	mg/kg	0.1000	0.0010	50	7/ 9/98	5:59	Ciesielski	8021B	5777
TPH-High (Florida Pro)	523.	mg/kg	100.	5.0	10	7/15/98	13:21	K.Phelps	FOEP	6374
Napthalene	ND	mg/kg	0.33	0.33	1	7/ 9/98	13:04	Carmichael	8100	6188
Acenaphthene	ND	mg/kg	0.33	0.33	1	7/ 9/98	13:04	Carmichael	8100	6188
Anthracene	ND	mg/kg	0.33	0.33	1	7/ 9/98	13:04	Carmichael	8100	6188
Fluoranthene	ND	mg/kg	0.333	0.330	1	7/ 9/98	13:04	Carmichael	8100	6188
Fluorene	ND	mg/kg	0.33	0.33	1	7/ 9/98	13:04	Carmichael	8100	6188
Pyrene	ND	mg/kg	0.33	0.33	1	7/ 9/98	13:04	Carmichael	8100	6188
Benzo(a)anthracene	ND	mg/kg	0.333	0.330	1	7/ 9/98	13:04	Carmichael	8100	6188
Benzo(a)pyrene	ND	mg/kg	0.33	0.33	1	7/ 9/98	13:04	Carmichael	8100	6188
Benzo(b)fluoranthene	ND	mg/kg	0.33	0.33	1	7/ 9/98	13:04	Carmichael	8100	6188
Benzo(k)fluoranthene	ND	mg/kg	0.33	0.33	1	7/ 9/98	13:04	Carmichael	8100	6188
Chrysene	ND	mg/kg	0.33	0.33	1	7/ 9/98	13:04	Carmichael	8100	6188
Dibenzo(a,h)anthracene	ND	mg/kg	0.33	0.33	1	7/ 9/98	13:04	Carmichael	8100	6188
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.33	0.33	1	7/ 9/98	13:04	Carmichael	8100	6188
Acenaphthylene	ND	mg/kg	0.33	0.33	1	7/ 9/98	13:04	Carmichael	8100	6188
Benzo(g,h,i)perylene	ND	mg/kg	0.33	0.33	1	7/ 9/98	13:04	Carmichael	8100	6188
Phenanthrene	ND	mg/kg	0.33	0.33	1	7/ 9/98	13:04	Carmichael	8100	6188

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
PAH's	30.0 gm	1.00 ml	7/ 8/98	Schweikert	3550



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A75702
Sample ID: FF-MW5-SS-9

Page 2

Surrogate	% Recovery	Target Range
-----	-----	-----
surr-a,a,a-Trifluorotoluene	107.	50. - 150.
surr-o-Terphenyl	108.	62. - 109.
Fla Pro Surr., C-35 hydrocarbon	82.	60. - 118.
PAH Surrogate	55.	24. - 122.

Report Approved By:

Michael H. Dunn

Report Date: 7/17/98

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

Laboratory Certification Number: HRS-E87358

**SPECIALIZED ASSAYS, INC.**

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

STATE ENVIRONMENTAL, INC. 5896

108 13TH AVENUE SOUTH
BIRMINGHAM, AL 35205

Lab Number: 98-A75700
Sample ID: FF-MW10-SS-9
Sample Type: Soil
Site ID:

Project: 9970082
Project Name: MAYPORT NAUSTIA
Sampler: DEWEY TRAPP

Date Collected: 6/24/98
Time Collected: 15:00
Date Received: 6/30/98
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	ND	ng/kg	0.5000	0.0010	500	7/ 6/98	21:55	Ciesielski	8021B	5777
Toluene	ND	ng/kg	0.5000	0.0010	500	7/ 6/98	21:55	Ciesielski	8021B	5777
Ethylbenzene	0.5500	ng/kg	0.5000	0.0010	500	7/ 6/98	21:55	Ciesielski	8021B	5777
Xylenes, total	2.650	ng/kg	1.000	0.0010	500	7/ 6/98	21:55	Ciesielski	8021B	5777
TPH-High (Florida Pro)	5980	ng/kg	400.	5.0	40	7/13/98	15:53	K. Phelps	FDEP	6374
Napthalene	ND	ng/kg	3.33	0.33	10	7/10/98	15:37	Carmichael	8100	6188
Acenaphthene	ND	ng/kg	3.33	0.33	10	7/10/98	15:37	Carmichael	8100	6188
Anthracene	ND	ng/kg	3.33	0.33	10	7/10/98	15:37	Carmichael	8100	6188
Fluoranthene	ND	ng/kg	3.33	0.330	10	7/10/98	15:37	Carmichael	8100	6188
Fluorene	ND	ng/kg	3.33	0.33	10	7/10/98	15:37	Carmichael	8100	6188
Pyrene	ND	ng/kg	3.33	0.33	10	7/10/98	15:37	Carmichael	8100	6188
Benzo(a)anthracene	ND	ng/kg	3.33	0.330	10	7/10/98	15:37	Carmichael	8100	6188
Benzo(a)pyrene	ND	ng/kg	3.33	0.33	10	7/10/98	15:37	Carmichael	8100	6188
Benzo(b)fluoranthene	ND	ng/kg	3.33	0.33	10	7/10/98	15:37	Carmichael	8100	6188
Benzo(k)fluoranthene	ND	ng/kg	3.33	0.33	10	7/10/98	15:37	Carmichael	8100	6188
Chrysene	ND	ng/kg	3.33	0.33	10	7/10/98	15:37	Carmichael	8100	6188
Dibenzo(a,h)anthracene	ND	ng/kg	3.33	0.33	10	7/10/98	15:37	Carmichael	8100	6188
Indeno(1,2,3-cd)pyrene	ND	ng/kg	3.33	0.33	10	7/10/98	15:37	Carmichael	8100	6188
Acenaphthylene	ND	ng/kg	3.33	0.33	10	7/10/98	15:37	Carmichael	8100	6188
Benzo(g,h,i)perylene	ND	ng/kg	3.33	0.33	10	7/10/98	15:37	Carmichael	8100	6188
Phenanthrene	ND	ng/kg	3.33	0.33	10	7/10/98	15:37	Carmichael	8100	6188

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
PAH's	30.0 gm	1.00 ml	7/ 8/98	Schweikert	3550



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2960 Foster Creighton Dr.
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ANALYTICAL REPORT

Laboratory Number: 98-A75700
Sample ID: FF-MW10-SS-9

Page 2

Surrogate	% Recovery	Target Range
-----	-----	-----
surr-a,a,a-Trifluorotoluene	107.	50. - 150.
PAH Surrogate	73.	24. - 122.

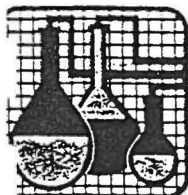
Report Approved By:

Michael H. Dunn

Report Date: 7/17/98

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

Laboratory Certification Number: HRS-E87358

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ANALYTICAL REPORT

STATE ENVIRONMENTAL, INC. 5896

608 13TH AVENUE SOUTH
BIRMINGHAM, AL 35205

Lab Number: 98-A75701
Sample ID: FF-MW11-SS-19
Sample Type: Soil
Site ID:

Project: 9970082
Project Name: MAYPORT NAUSTIA
Sampler: DEWEY TRAPP

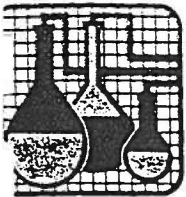
Date Collected: 6/25/98
Time Collected: 12:40
Date Received: 6/30/98
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	ND	ng/kg	0.0010	0.0010	1	7/ 6/98	22:31	Ciesielski	8021B	5777
Toluene	ND	ng/kg	0.0010	0.0010	1	7/ 6/98	22:31	Ciesielski	8021B	5777
Ethylbenzene	ND	ng/kg	0.0010	0.0010	1	7/ 6/98	22:31	Ciesielski	8021B	5777
Xylenes, total	ND	ng/kg	0.0020	0.0010	1	7/ 6/98	22:31	Ciesielski	8021B	5777
TPH-High (Florida Pro)	ND	ng/kg	10.0	5.0	1	7/11/98	10:58	K.Phelps	FDEP	6374
Napthalene	ND	ng/kg	0.33	0.33	1	7/ 9/98	12:26	Carmichael	8100	6188
Acenaphthene	ND	ng/kg	0.33	0.33	1	7/ 9/98	12:26	Carmichael	8100	6188
Anthracene	ND	ng/kg	0.33	0.33	1	7/ 9/98	12:26	Carmichael	8100	6188
Fluoranthene	ND	ng/kg	0.333	0.330	1	7/ 9/98	12:26	Carmichael	8100	6188
Fluorene	ND	ng/kg	0.33	0.33	1	7/ 9/98	12:26	Carmichael	8100	6188
Pyrene	ND	ng/kg	0.33	0.33	1	7/ 9/98	12:26	Carmichael	8100	6188
Benzo(a)anthracene	ND	ng/kg	0.333	0.330	1	7/ 9/98	12:26	Carmichael	8100	6188
Benzo(a)pyrene	ND	ng/kg	0.33	0.33	1	7/ 9/98	12:26	Carmichael	8100	6188
Benzo(b)fluoranthene	ND	ng/kg	0.33	0.33	1	7/ 9/98	12:26	Carmichael	8100	6188
Benzo(k)fluoranthene	ND	ng/kg	0.33	0.33	1	7/ 9/98	12:26	Carmichael	8100	6188
Chrysene	ND	ng/kg	0.33	0.33	1	7/ 9/98	12:26	Carmichael	8100	6188
Dibenzo(a,h)anthracene	ND	ng/kg	0.33	0.33	1	7/ 9/98	12:26	Carmichael	8100	6188
Indeno(1,2,3-cd)pyrene	ND	ng/kg	0.33	0.33	1	7/ 9/98	12:26	Carmichael	8100	6188
Acenaphthylene	ND	ng/kg	0.33	0.33	1	7/ 9/98	12:26	Carmichael	8100	6188
Benzo(g,h,i)perylene	ND	ng/kg	0.33	0.33	1	7/ 9/98	12:26	Carmichael	8100	6188
Phenanthrene	ND	ng/kg	0.33	0.33	1	7/ 9/98	12:26	Carmichael	8100	6188

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
PAH's	30.0 gm	1.00 ml	7/ 8/98	Schweikert	3550



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ANALYTICAL REPORT

Laboratory Number: 98-A75701
Sample ID: FF-MW11-SS-19

Page 2

<u>Surrogate</u>	<u>% Recovery</u>	<u>Target Range</u>
surr-a,a,a-Trifluorotoluene	139.	50. - 150.
surr-o-Terphenyl	91.	62. - 109.
Fla Pro Surr., C-35 hydrocarbon	76.	60. - 118.
PAH Surrogate	38.	24. - 122.

Report Approved By: _____

Michael H. Dunn

Report Date: 7/17/98

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

Laboratory Certification Number: HRS-E87358

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ANALYTICAL REPORT

STATE ENVIRONMENTAL, INC. 5896

108 13TH AVENUE SOUTH
BIRMINGHAM, AL 35205

Lab Number: 98-A75703

Sample ID: FF-SS-RS-1

Sample Type: Water

Site ID:

Project: 9970082

Project Name: MAYPORT NAUSTIA

Sampler: DEWEY TRAPP

Date Collected: 6/26/98

Time Collected: 10:35

Date Received: 6/30/98

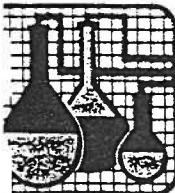
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Benzene	ND	ug/l	1.0	1.0	1	7/ 6/98	17:48	T. Johnson	602	6645
Toluene	ND	ug/l	1.0	1.0	1	7/ 6/98	17:48	T. Johnson	602	6645
Ethylbenzene	ND	ug/l	1.0	1.0	1	7/ 6/98	17:48	T. Johnson	602	6645
Xylenes, total	ND	ug/l	1.0	1.0	1	7/ 6/98	17:48	T. Johnson	602	6645
Naphthalene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
Acenaphthene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
Anthracene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
Fluoranthene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
Fluorene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
Pyrene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
Benzo(a)anthracene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
Benzo(a)pyrene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
Benzo(b)fluoranthene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
Benzo(k)fluoranthene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
Chrysene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
Dibenzo(a,h)anthracene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
Acenaphthylene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
Benzo(g,h,i)perylene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
1-Methylnaphthalene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
2-Methylnaphthalene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933
Phenanthrene	ND	ug/l	5.0	5.0	1	7/ 8/98	10:12	M. Goodrich	610	5933

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
PAH's	980. ml	1.00 ml	7/ 2/98	Fitzwater	3510



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ANALYTICAL REPORT

Laboratory Number: 98-A75703
Sample ID: FF-SS-RS-1

Page 2

Surrogate	% Recovery	Target Range
BTEX/GRD Surr., a,a,a-trifluorotoluene	87.	50. - 150.
PID Surr., a,a,a-trifluorotoluene	99.	50. - 150.
Hall Surr., 2-chloropropane	88.	61. - 132.
Hall Surr., chloroprene	90.	64. - 130.
Hall Surr., 1-chloro-3-fluorobenzene	89.	65. - 132.
PAH Surrogate	44.	33. - 123.

Report Approved By:

Michael H. Dunn

Report Date: 7/17/98

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

Laboratory Certification Number: HRS-E87358

1608 13th Avenue South
Birmingham, Alabama 35205
(205) 918-4000 (FAX) (205) 918-4050

#5896

105402 CHAIN-OF-CUSTODY

NO.: 00001

Page: 1 of 1

PROJECT NO.: 970082

PROJECT NAME: MAYPORT NAUSTA/FUEL FARM

P.O. NO.:

LAB DESTINATION: Specialized Assays

SAMPLER(S) NAME:

Dewey Trapp

TITLE:

CONTAINERS

Preserved (Code)

Lead (yes/no)

Code: A - None
B - HN03
C - H₂SO₄
D - NaOH
E - HCl
F -

REMARKS

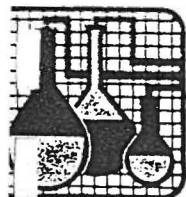
Lab Code - for Lab use only	Yr. Date	Time	Comp	Grab	Sample No./ Sample Location	SOIL	WATER	SOLID	OTHER	NON-AQUEOUS LIQUID	No.	Volume	Type	TEST: METHOD: (8100)	TEST: METHOD: (8100)	TEST: METHOD: (8100)	TEST: METHOD: (8100)	TEST: METHOD: (8100)	TEST: METHOD: (8100)
75700	6/24/98	1500			FF-MW10-SS9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2	207	G	✓	✓	✓			
101	6/25/98	1240			FF-MW11-SS19	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2	207	G	✓	✓	✓			
75702	6/26/98	1225			FF-MW5-SS9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2	207	G	✓	✓	✓			
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						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
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						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										

RECEIVED

JUL 23 1998

CHATE ENVIRONMENTAL

Relinquished by: (Signature): <i>Dewey Trapp</i>	Date: 6/25/98	Time: 1700	Received by: (Signature): <i>M. Bealy</i>	Date: 6/25/98	Time: 9:00	LAB COMMENTS		
Relinquished by: (Signature):	Date:	Time:	Received by: (Signature):	Date:	Time:	REMARKS ON SAMPLE RECEIVED BY LAB:	SAMPLE SHIPPING METHOD	SAMPLE CONTAINER TYPE
Relinquished by: (Signature):	Date:	Time:	Received for Laboratory by: (Signature):	Date:	Time:	Bottle Intact: <input type="checkbox"/>	Hand Delivery: <input type="checkbox"/>	P = Plastic
						Preserved: <input type="checkbox"/>	Air (specify): <input type="checkbox"/>	G = Glass
						Chilled: 4°C <input type="checkbox"/>	Other (specify): <input type="checkbox"/>	GA = Glass Amber
						Other: <input type="checkbox"/>		



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2960 Foster Creighton Dr.
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ANALYTICAL REPORT

TE ENVIRONMENTAL, INC. 5896
108 13TH AVENUE SOUTH
BIRMINGHAM, AL 35205

Lab Number: 98-A75705
Sample ID: FF-MW-10
Sample Type: Water
Site ID:

Project: 9970082
Project Name: MAYPORT NAUSTIA
Sampler: DEWEY TRAPP

Date Collected: 6/26/98
Time Collected: 11:25
Date Received: 6/30/98
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Florida Pro	2810	ug/l	202.	100.	1	7/12/98	4:47	K. Phelps	FDEP	5685
naphthalene	37.0	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
acenaphthene	ND	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
Anthracene	ND	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
fluoranthene	ND	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
luorene	ND	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
Pyrene	ND	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
Benzo(a)anthracene	ND	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
Benzo(a)pyrene	ND	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
Benzo(b)fluoranthene	ND	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
Benzo(k)fluoranthene	ND	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
Chrysene	ND	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
Dibenzo(a,h)anthracene	ND	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
acenaphthylene	ND	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
Benzo(g,h,i)perylene	ND	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
1-Methylnaphthalene	67.0	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
2-Methylnaphthalene	81.0	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
Phenanthrene	ND	ug/l	5.0	5.0	1	7/ 8/98	11:25	M. Goodrich	610	5933
VOLATILE ORGANICS by GC										
Benzene	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	602	2641
Chlorobenzene	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	602/601	2641
1,2-Dichlorobenzene	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	602/601	2641
1,3-Dichlorobenzene	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	602/601	2641
1,4-Dichlorobenzene	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	602/601	2641
Ethylbenzene	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	602	2641
Toluene	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	602	2641
m,p-Xylenes	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	602	2641
o-Xylene	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	602	2641
Bromodichloromethane	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
Bromoform	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
Bromomethane	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
Carbon tetrachloride	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
Chloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
2-Chloroethylvinylether	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641



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ANALYTICAL REPORT

Laboratory Number: 98-A75705

Sample ID: FF-MW-10

Page 2

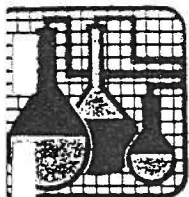
Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Chloroform	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
Chloromethane	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
Dibromochloromethane	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
Ethylene Dibromide	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
vinyl chloride	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
1,1,1-trichlorodifluoromethane	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
1,1-Dichloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
1,2-Dichloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
1,1-Dichloroethene	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
cis-1,2-Dichloroethene	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
trans-1,2-Dichloroethene	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
2,2-Dichloropropane	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
cis-1,3-Dichloropropene	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
trans-1,3-Dichloropropene	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
1,1,2,2-tetrachloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
1,1,2,2-Tetrachloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
1,1,1-Trichloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
1,1,2-Trichloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
Trichloroethene	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
Trichlorofluoromethane	ND	ug/l	1.0	1.0	1	7/ 2/98	17:27	E. Smith	601	2641
METALS*										
Lead	ND	mg/l	0.0030	0.0030	1	7/ 3/98	10:10	R. Kelley	239.2	2815

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol Extracted		Extract Vol	Date	Analyst	Method
PAH's	1000 ml	1.00 ml		7/ 2/98	Fitzwater	3510
Fla Pro	990. ml	2.0 ml		7/ 3/98	Schweikert	FDEP

Surrogate	% Recovery	Target Range
Fla Pro Surr., D-Terphenyl	101.	82. - 142.
Fla Pro Surr., C-35 Hydrocarbon	93.	55. - 118.
PID Surr., a,a,a-trifluorotoluene	99.	50. - 150.
Hall Surr., 2-chloropropane	91.	61. - 132.
Hall Surr., chloroprene	93.	64. - 130.



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ANALYTICAL REPORT

Laboratory Number: 98-A75705
Sample ID: FF-MW-10

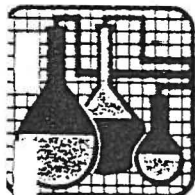
Page 3

<u>Surrogate</u>	<u>% Recovery</u>	<u>Target Range</u>
all Surr., 1-chloro-3-fluorobenzene	90.	65. - 132.
AH Surrogate	42.	33. - 123.

Report Approved By: Michael H. Dunn Report Date: 7/17/98

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

Laboratory Certification Number: HRS-E87358

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ANALYTICAL REPORT

STATE ENVIRONMENTAL, INC. 5896

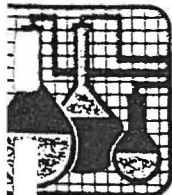
608 13TH AVENUE SOUTH
BIRMINGHAM, AL 35205

Lab Number: 98-A75706
Sample ID: FF-MW-11
Sample Type: Water
Site ID:

Project: 9970082
Project Name: MAYPORT NAUSTIA
Sampler: DEWEY TRAPP

Date Collected: 6/26/98
Time Collected: 12:10
Date Received: 6/30/98
Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Florida Pro	1110	ug/l	204.	100.	1	7/12/98	7:12	K. Phelps	FDEP	5685
VOLATILE ORGANICS by GC										
Benzene	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	602	2641
Chlorobenzene	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	602/601	2641
1,2-Dichlorobenzene	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	602/601	2641
1,3-Dichlorobenzene	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	602/601	2641
1,4-Dichlorobenzene	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	602/601	2641
Ethylbenzene	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	602	2641
Toluene	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	602	2641
m,p-Xylenes	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	602	2641
o-Xylene	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	602	2641
Bromodichloromethane	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
Bromoform	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
Bromomethane	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
Carbon tetrachloride	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
Chloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
2-Chloroethylvinylether	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
Chloroform	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
Chloromethane	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
Dibromochloromethane	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
Ethylene Dibromide	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
Vinyl chloride	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
Dichlorodifluoromethane	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
1,1-Dichloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
1,2-Dichloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
1,1-Dichloroethene	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
cis-1,2-Dichloroethene	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
trans-1,2-Dichloroethene	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
1,2-Dichloropropane	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
cis-1,3-Dichloropropene	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
trans-1,3-Dichloropropene	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
Methylene chloride	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
1,1,2,2-Tetrachloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
Tetrachloroethene	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
1,1,1-Trichloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641



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ANALYTICAL REPORT

Laboratory Number: 98-A75706
Sample ID: FF-MW-11

Page 2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,1,2-Trichloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
1,1-Dichloroethene	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
1,1-Dichlorofluoromethane	ND	ug/l	1.0	1.0	1	7/ 2/98	18:37	E. Smith	601	2641
ETALS*										
ad	ND	ng/l	0.0030	0.0030	1	7/ 3/98	10:10	R. Kelley	239.2	2615

* = Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
Fla Pro	980. ml	2.0 ml	7/ 3/98	Schweikert	FDEP

Surrogate	% Recovery	Target Range
Fla Pro Surr., D-Terphenyl	127.	82. - 142.
Fla Pro Surr., C-35 Hydrocarbon	92.	55. - 118.
D Surr., a,a,a-trifluorotoluene	98.	50. - 150.
all Surr., 2-chloropropane	85.	61. - 132.
all Surr., chloroprene	91.	64. - 130.
all Surr., 1-chloro-3-fluorobenzene	85.	65. - 132.

Report Approved By:

Michael H. Dunn

Report Date: 7/17/98

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

Laboratory Certification Number: HRS-E87358



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ANALYTICAL REPORT

DATE ENVIRONMENTAL, INC. 5896

8 13TH AVENUE SOUTH
BIRMINGHAM, AL 35205

Lab Number: 98-A76312

Sample ID: FF-MW-11

Sample Type: Water

Site ID:

Subject:

Project Name: NAS MAYPORT FUEL FARM

Sampler:

Date Collected: 6/30/98

Time Collected: 8:47

Date Received: 7/1/98

Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS*										
Naphthalene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
Acenaphthene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
Anthracene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
Fluoranthene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
Fluorene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
Pyrene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
Benzo(a)anthracene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
Benzo(a)pyrene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
Benzo(b)fluoranthene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
Benzo(k)fluoranthene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
Benzene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
Dibenzo(a,h)anthracene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
Acenaphthylene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
Benzo(g,h,i)perylene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
1-Methylnaphthalene	16.0	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
2-Methylnaphthalene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936
Phenanthrene	ND	ug/l	5.0	5.0	1	7/ 8/98	0:26	M. Goodrich	610	5936

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
PAH's	1000 ml	1.00 ml	7/ 7/98	Fitzwater	3510

Surrogate	% Recovery	Target Range
PAH Surrogate	47.	33. - 123.



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ANALYTICAL REPORT

Laboratory Number: 98-A76312

Sample ID: FF-MW-11

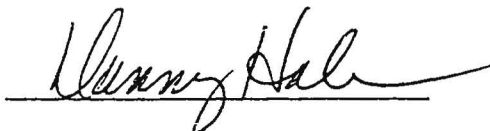
Page 2

Surrogate

% Recovery

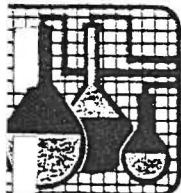
Target Range

Report Approved By:



Report Date: 7/ 8/98

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director



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ANALYTICAL REPORT

SITE ENVIRONMENTAL, INC. 5896

108 13TH AVENUE SOUTH
BIRMINGHAM, AL 35205

Lab Number: 98-A75704

Sample ID: FF-MW-RS-1

Sample Type: Water

Site ID:

Project: 9970082

Project Name: MAYPORT NAUSTIA

Sampler: DEWEY TRAPP

Date Collected: 6/26/98

Time Collected: 10:45

Date Received: 6/30/98

Time Received: 9:00

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
ORGANIC PARAMETERS										
Florida Pro	ND	ug/l	202.	100.	1	7/12/98	3:59	K. Phelps	FDEP	5685
aphthalene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
acenaphthene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
Anthracene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
luoranthene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
luorene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
Pyrene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
benzo(a)anthracene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
benzo(a)pyrene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
Benzo(b)fluoranthene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
Benzo(k)fluoranthene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
chrysene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
vi benzo(a,h)anthracene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
Indeno(1,2,3-cd)pyrene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
acenaphthylene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
benzo(g,h,i)perylene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
1-Methylnaphthalene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
2-Methylnaphthalene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
phenanthrene	ND	ug/l	5.6	5.0	1	7/ 8/98	10:48	M. Goodrich	610	5933
VOLATILE ORGANICS by GC										
benzene	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	602	2641
Chlorobenzene	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	602/601	2641
1,2-Dichlorobenzene	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	602/601	2641
1,3-Dichlorobenzene	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	602/601	2641
1,4-Dichlorobenzene	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	602/601	2641
Ethylbenzene	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	602	2641
Toluene	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	602	2641
m,p-Xylenes	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	602	2641
o-Xylene	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	602	2641
Bromodichloromethane	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
Bromoform	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
Bromomethane	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
Carbon tetrachloride	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
Chloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
2-Chloroethylvinylether	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641



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ANALYTICAL REPORT

Laboratory Number: 98-A75704

Sample ID: FF-MW-RS-1

Page 2

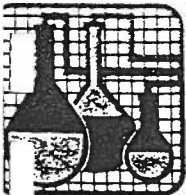
Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Chloroform	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
Chloromethane	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
Bromochloromethane	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
Ethylene Dibromide	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
Methyl chloride	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
Dichlorodifluoromethane	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
1,1-Dichloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
1,2-Dichloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
1,1-Dichloroethene	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
cis-1,2-Dichloroethene	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
trans-1,2-Dichloroethene	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
1,2-Dichloropropane	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
cis-1,3-Dichloropropene	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
trans-1,3-Dichloropropene	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
Ethylene chloride	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
1,1,2,2-Tetrachloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
Tetrachloroethene	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
1,1,1-Trichloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
1,1,2-Trichloroethane	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
Trichloroethene	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
Trichlorofluoromethane	ND	ug/l	1.0	1.0	1	7/ 2/98	16:50	E. Smith	601	2641
METALS										
Lead	ND	mg/l	0.0030	0.0030	1	7/ 3/98	10:10	R. Kelley	239.2	2815

ND = Not detected at the report limit.

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Analyst	Method
PAH's	900. ml	1.00 ml	7/ 2/98	Fitzwater	3510
Fla Pro	990. ml	2.0 ml	7/ 3/98	Schweikert	FOEP

Surrogate	% Recovery	Target Range
Fla Pro Surr., D-Terphenyl	123.	82. - 142.
Fla Pro Surr., C-35 Hydrocarbon	96.	55. - 118.
PID Surr., a,a,a-trifluorotoluene	99.	50. - 150.
Hall Surr., 2-chloropropane	86.	61. - 132.
Hall Surr., chloroprene	91.	64. - 130.



SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 98-A75704
Sample ID: FF-MW-RS-1

Page 3

<u>Surrogate</u>	<u>% Recovery</u>	<u>Target Range</u>
all Surr., 1-chloro-3-fluorobenzene	88.	65. - 132.
AH Surrogate	52.	33. - 123.

Report Approved By:

Michael H. Dunn

Report Date: 7/17/98

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

Laboratory Certification Number: HRS-E87358

1608 13th Avenue South
Birmingham, Alabama 35205
(205) 918-4000 (FAX) (205) 918-4050

5896 105540

(DEWEY TRAPP)

PROJECT NO.:		PROJECT NAME: NAS MAYPORT FUEL FARM				CONTAINERS		X		Preserved (Code)	
P.O. NO.:		LAB DESTINATION: SPECIAL ASSAYS								Lead (yes/no)	
SAMPLER(s) NAME: AEROSTAR										Code: A - None B - HNO3 C - H2SO4 D - NaOH E - HCl F -	
TITLE: MCM											
Lab Code - for Lab use only	Yr. 98	Date 6/30	Time 8:47	Comp	Grab	Sample No./ Sample Location	SOIL	WATER	SOLID OTHER	NON-AQUEOUS LIQUID	REMARKS
76312	6/30/98	8:47				FF-MW-11	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

RECEIVED
JUL 13 1998
SHATE ENVIRONMENTAL

Relinquished by: (Signature): M.C. Myles	Date: 6/30/98	Time: 1700	Received by: (Signature): FED EX	Date: 6/30	Time: 1700	LAB COMMENTS: 4°C																				
Relinquished by: (Signature): FED EX	Date:	Time:	Received by: (Signature):	Date:	Time:	REMARKS ON SAMPLE RECEIVED BY LAB:																				
Relinquished by: (Signature):	Date:	Time:	Received for Laboratory by: (Signature): J. Jack	Date: 7/1/98	Time: 900	<table border="1"> <tr> <td>Bottle intact:</td> <td><input type="checkbox"/></td> <td>Hand Delivery:</td> <td><input type="checkbox"/></td> <td>P = Plastic</td> </tr> <tr> <td>Preserved:</td> <td><input type="checkbox"/></td> <td>Air (specify):</td> <td><input type="checkbox"/></td> <td>G = Glass</td> </tr> <tr> <td>Chilled:</td> <td><input type="checkbox"/></td> <td>Other (specify):</td> <td><input type="checkbox"/></td> <td>GA = Glass Amber</td> </tr> <tr> <td>Other:</td> <td><input type="checkbox"/></td> <td></td> <td></td> <td></td> </tr> </table>	Bottle intact:	<input type="checkbox"/>	Hand Delivery:	<input type="checkbox"/>	P = Plastic	Preserved:	<input type="checkbox"/>	Air (specify):	<input type="checkbox"/>	G = Glass	Chilled:	<input type="checkbox"/>	Other (specify):	<input type="checkbox"/>	GA = Glass Amber	Other:	<input type="checkbox"/>			
Bottle intact:	<input type="checkbox"/>	Hand Delivery:	<input type="checkbox"/>	P = Plastic																						
Preserved:	<input type="checkbox"/>	Air (specify):	<input type="checkbox"/>	G = Glass																						
Chilled:	<input type="checkbox"/>	Other (specify):	<input type="checkbox"/>	GA = Glass Amber																						
Other:	<input type="checkbox"/>																									

CHAIN-OF-CUSTODY

NO.: 00001

Page: 1 of 2

1608 13th Avenue South
Birmingham, Alabama 35205
(205) 918-4000 (FAX) (205) 918-4050

PROJECT NO.: 9720082 PROJECT NAME: MAYNARD MAUSTON/Fuel Farm

P.O. NO.: LAB DESTINATION: Specialized Assays

SAMPLER(s) NAME: Dewey Trany
TITLE:

Lab Code - for Lab Use only	Yr. _____ Date _____	Time	Comp	Grab	Sample No./ Sample Location	SOIL	WATER	SOLID OTHER	NON-AQUEOUS LIQUID	No.	Volume	Type	TEST: METHOD	TEST: METHOD	TEST: METHOD	TEST: METHOD	TEST: METHOD	REMARKS
75703	6/24/98	1035		✓	FF-SS-RS1 (50.7) (Enviro)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	10 GA 400 P 100 GA		✓	✓				
04	6/24/98	1045		✓	FF-MW-RS1 (GW) (Enviro)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	250.0 P 92.0 GA 100 GA		✓	✓	✓	✓	✓	
05	6/24/98	1125		✓	FF-MW-10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	250.0 P 100 GA 100 GA		✓	✓	✓	✓	✓	
75706	6/24/98	1210		✓	FF-MW-11	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	100 GA 250.0 P 40.0 GA		✓	✓	✓	✓	✓	
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									

FLORIDA KAG
E A E E B
yes yes yes yes yes
TEST: METHOD: BTEX (LEPZ)
TEST: METHOD: PAH + HAP (LEPZ)
TEST: METHOD: VOA + 12-DICHL (LEPZ)
TEST: METHOD: EOD (LEPZ)
TEST: METHOD: Total Lead (LEPZ)
TEST: METHOD: (239.2)

Preserved (Code)

Iced (yes/no)

Code: A - None
B - HNO3
C - H2SO4
D - NaOH
E - HCl
F -

Relinquished by: (Signature):

Date: 6/26/98 Time: 1700

Received by: (Signature):

Date: Time:

LAB COMMENTS

Relinquished by: (Signature):

Date: Time:

Received by: (Signature):

Date: Time:

REMARKS ON SAMPLE RECEIVED BY LAB:

SAMPLE SHIPPING METHOD

SAMPLE CONTAINER TYPE

Relinquished by: (Signature):

Date: Time:

Received for Laboratory by: (Signature):

Date: Time: 6/30/98 9:00

Bottle Intact: ☐
Preserved: ☐
Chilled: ☐
Other: ☐

Hand Delivery ☐
Air (specify) ☐
Other (specify) ☐

P = Plastic
G = Glass
GA = Glass Amber

CHAIN-OF-CUSTODY

NO.: 00001

Page: 2 of 2

1608 13th Avenue South
Birmingham, Alabama 35205
(205) 918-4000 (FAX) (205) 918-4050

PROJECT NO.: 9920082 PROJECT NAME: Mayport NARSTA / Fuel Farm

P.O. NO.: LAB DESTINATION: Specialized assays

SAMPLER(s) NAME: Dewey Trapp

TITLE:

Lab Code - for Lab use only	Yr. Date	Time	Comp	Grab	Sample No./ Sample Location	SOIL	WATER	SOLID OTHER	NON-AQUEOUS LIQUID	No.	Volume	Type	TEST: METHOD	TEST: METHOD	TEST: METHOD	TEST: METHOD	TEST: METHOD	TEST: METHOD	REMARKS
75703	4/24/98	1035			✓ FF-SS-RS1 (Soil Equip)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	1L	GA	✓						
04	4/24/98	1045			✓ FF-MW-RS1 (Low Equip)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	1L	GA	✓						
05	4/24/98	1125			✓ FF-MW-10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	1L	GA	✓						
75706	4/24/98	1210			✓ FF-MW-11	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	1L	GA	✓						
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										

Relinquished by: (Signature): <i>Dewey Trapp</i>	Date: 4/25/98	Time: 1200	Received by: (Signature): "	Date:	Time:	LAB COMMENTS
Relinquished by: (Signature):	Date:	Time:	Received by: (Signature):	Date:	Time:	
Relinquished by: (Signature):	Date:	Time:	Received for Laboratory by: (Signature): MB	Date: 6/5/98	Time: 9:00	

REMARKS ON SAMPLE RECEIVED BY LAB:	SAMPLE SHIPPING METHOD	SAMPLE CONTAINER TYPE
Bottle Intact: <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	P = Plastic
Preserved: <input type="checkbox"/>	Air (specify) <input type="checkbox"/>	G = Glass
Chilled: <input type="checkbox"/>	Other (specify) <input type="checkbox"/>	GA = Glass Ambar
Other: <input type="checkbox"/>		

1608 13th Avenue South
Birmingham, Alabama 35205
(205) 918-4000 (FAX) (205) 918-4050

CHAIN-OF-CUSTODY

Page: 1 of 2

105402

Florida KAG

PROJECT NO.: 9720082		PROJECT NAME: MAYPORT MARINA/Fuel Farm		CONTAINERS																
P.O. NO.:		LAB DESTINATION: Specialized Assays																		
SAMPLER(S) NAME: Dewey Trapp																				
TITLE:																				
Lab Code - for Lab use only	Yr. Date	Time	Comp	Grab	Sample No./ Sample Location	SOIL	WATER	SOLID OTHER	NON-AQUEOUS LIQUID	No.	Volume	Type	TEST: METHOD: BTZK	TEST: METHOD: (6002)	TEST: METHOD: (6004) + (6005)	TEST: METHOD: (6012)	TEST: METHOD: (6006)	TEST: METHOD: (6003)	TEST: METHOD: (6007)	TEST: METHOD: (6008)
75703	6/24/98	1035		✓	FF-SS-RS1 (50.7) (Envia)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	100	GA	✓	✓						
04	6/24/98	1045		✓	FF-MW-RS1 (60) (Envia)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	250.0	GA	✓	✓	✓	✓	✓			
05	6/24/98	1125		✓	FF-MW-10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	250.0	GA	✓	✓	✓	✓	✓			
75706	6/24/98	1210		✓	FF-MW-11	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	250.0	GA	✓	✓	✓	✓	✓			
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
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						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											

CHAIN-OF-CUSTODY

Page: 2 of 2

1608 13th Avenue South
Birmingham, Alabama 35205
(205) 918-4000 (FAX) (205) 918-4050

PROJECT NO.: 9920082 PROJECT NAME: Mayport Navstar / Fuel Farm

P.O. NO.: LAB DESTINATION: Specialized Assays

SAMPLER(s) NAME: Dewey Trapp

Lab Code - for Lab use only	Yr. Date	Time	Comp	Grab	Sample No./ Sample Location	SOIL	WATER	SOLID OTHER	NON-AQUEOUS LIQUID	No.	Volume	Type	TEST: METHOD	TEST: METHOD	TEST: METHOD	TEST: METHOD	TEST: METHOD	TEST: METHOD	REMARKS
75703	4/24/98	1035			FF-SS-RS1 (Soil Equip)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	1L	GA	✓						
04	4/24/98	1045			FF-MW-RS1 (Low Equip)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	1L	GA	✓						
05	4/24/98	1125			FF-MW-10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	1L	GA	✓						
75706	4/24/98	1210			FF-MW-11	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	1L	GA	✓						
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										

Relinquished by: (Signature): <i>Dewey Trapp</i>	Date: 4/24/98	Time: 1700	Received by: (Signature):	Date:	Time:	LAB COMMENTS
Relinquished by: (Signature):	Date:	Time:	Received by: (Signature):	Date:	Time:	
Relinquished by: (Signature):	Date:	Time:	Received for Laboratory by: (Signature): <i>MB</i>	Date: 6/5/98	Time: 9:00	

REMARKS ON SAMPLE RECEIVED BY LAB:	SAMPLE SHIPPING METHOD	SAMPLE CONTAINER TYPE
Bottle intact: <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	P = Plastic
Preserved: <input type="checkbox"/>	Air (specify) <input type="checkbox"/>	G = Glass
Chilled: <input type="checkbox"/>	Other (specify) <input type="checkbox"/>	GA = Glass Amber
Other: <input type="checkbox"/>		